

## PATENT ABSTRACTS OF JAPAN

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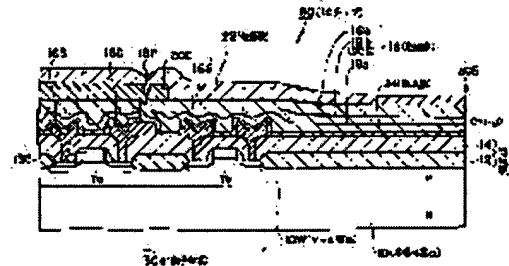
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## (54) SEMICONDUCTOR DEVICE

(57)Abstract:

**PURPOSE:** To prevent moisture from penetrating an element region from a chip end via an interlayer insulation film, in an integrated circuit (IC) chip.

CONSTITUTION: In an IC chip 30, under an interlayer insulation film 18 comprising a silicon oxide film 18a, a spin-on-glass (SOG) film 18b, and a silicon oxide film 18c, etc., a waterproof film 24 made of silicon nitride, etc., is so provided as to cover an element region 30a. By virtue of the waterproof film 24, moisture (H<sub>2</sub>O) is so intercepted that it can not reach the element region 30a. Therefore, in the element region 30a, the inversion of the conduction type of the surface of a P-type well region 10W and the corrosions of wiring material layers 16S, 16D, and 16S', etc., can be prevented for the reliability of a semiconductor device to be improved. Still, the waterproof film 24 is provided just under the silicon oxide film 18a, but is restricted to a lower layer than the SOG film 18b.



## LEGAL STATUS

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